REMARKS

By the present response, Applicant has canceled claim 6 without disclaimer. Further, Applicant has amended claims 1-5, 8-10, 12 and 14-21 to further clarify the invention. Claims 1-5 and 7-21 remain pending in the present application.

In the Office Action, the disclosure has been objected to because of informalities. Claims 1-21 have been rejected under 35 U.S.C. § 112, second paragraph. Claims 1, 4-7 14, 17 and 18 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,839,346 (Kametani et al.) in view of APA. The Examiner indicates that claims 2, 3, 8-13, 15, 16 and 19-21 would be allowable if rewritten to overcome the rejections under 35 U.S.C. § 112 and to include all of the limitations of the base claim and any intervening claims.

Allowable Subject Matter

Applicants thank the Examiner for indicating that claims 2, 3, 8-13, 15, 16 and 19-21 would be allowable if rewritten to overcome the rejections under 35 U.S.C. § 112 and to include all of the limitations of the base claim and any intervening claims.

Specification Objections

The disclosure has been objected to because of informalities. Applicant has amended the specification to further clarify the invention and respectfully request that these objections be withdrawn.

Serial No. **10/026,777**
Amdt. dated <u>January 17, 2006</u>
Reply to Office Action of <u>October 17, 2005</u>

Docket No. **K-0380**

35 U.S.C. § 112 Rejections

Claims 1-21 have been rejected under 35 U.S.C. § 112, second paragraph. The Examiner asserts that it is not clear what is meant by "belonging" and "not belonging" of a destination address to the routing device. However, Applicant submits that the Examiner's interpretation is correct and that one of ordinary scope in the art would understand the phrase "checking whether said destination address belongs to said routing device", as recited in the present claims, to mean that it is determined whether the destination address is the same as the address of the routing device. This is fully supported by Applicant's specification and drawings.

Regarding claims 2 and 6, claim 6 has been canceled. Further, in claim 2 it is clear that it does not relate to transmitting packets regardless if their destination address belongs to the routing device or not, but relates to transmitting a packet to <u>a first interface corresponding to the Nth cache address if the destination address is identical to the Nth cache address</u>, as opposed to transmitting the packet to the recent interface if the destination address is identical to the recent address, as in claim 1.

Accordingly, Applicants respectfully request that these rejections be withdrawn and that these claims be allowed.

35 U.S.C. § 103 Rejections

Claims 1, 4-7 14, 17 and 18 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Kametani et al. in view of APA. Claim 6 has been canceled. Applicant respectfully traverses these rejections as to the remaining pending claims.

Kametani discloses a packet switching apparatus that includes a plurality of lower layer processing units, a table, and a processing unit. Each of the plurality of lower layer processing units carries to a process for a data link layer and a physical layer to a packet. The table stores flow data which includes a routing table and a search key. The processing unit searches the flow data from the table based on a search key of a routing packet received via one of the plurality of lower layer processing units, when the flow data for the search key of the routing packet is registered on the table. The processing unit selectively transfers the routing packet to one of the plurality of lower processing units based on the routing data of the searched flow data.

Regarding claims 1 and 14 Applicant submits that none of the cited references, taken alone or in any proper combination, disclose suggest or render obvious the limitations in the combination of these claims. For example, the Examiner asserts that Kametani discloses a routing device including an instant cache table that stores recent address and recent interface associated with the most recent packet transmission process made by the routing device, by the IP flow table in figure 3. However, the IP flow table merely contains information that is searched by the search processing section in response to a search instruction, where a search key

composed of the IP destination address and/or an IP source address are used for the search.

The IP flow table is searched to determine if the received packets have been registered, and if

registered, replies the registered result of a routing process of the packet to the packet processing

section. If not registered, i.e., does not exist in the IP flow table, temporary registration of the

IP flow to the IP flow table occurs. This is not an instant cache table storing a recent address

and a recent interface associated with the most recent packet transmission process made by the

routing device, as recited in the claims of the present application. The IP flow table in Kametani

stores all flow data for all routing packets that are registered in the table. This is not information

related to the most recent packet transmission made by the routing device.

Moreover, the Examiner asserts that Kametani discloses checking whether the destination

address is identical to the recent address if the destination address does not belong to the routing

device, in col. 9, lines 29-42. However, these portions of Kametani merely disclose as has been

noted previously, that the IP flow table is searched using the search key received from the packet

processing section to determine if the IP flow corresponding to the search key is registered on

the IP flow table, and if so, the microprocessor has already carried out the routing process to a

packet having the same type, source address and destination address as the received packet,

therefore, the packet can be transferred without any routing process by the microprocessor

under software control. This is not checking whether the destination address is identical to the

recent address if the destination address does not belong to the routing device, as recited in the

claims of the present application. Kametani merely discloses that the switching device (e.g., routing device) routes a received packet under software control versus the microprocessor being involved if the information searched in the IP flow table shows that the flow has been previously performed and therefore is registered. If registered, the packet is transferred to the destination address. These portions do not disclose or suggest checking whether the destination address is identical to the recent address if the destination address does not belong to the routing device.

The Examiner admits that Kametani does not disclose or suggest checking whether the destination address belongs to the routing device, but asserts that the APA discloses these limitations, the Examiner asserting that he interprets the top application module of figure 1 for processing some packet received at the routing device as being the claimed packets having destination address belonging to the routing device, "since the routing device in such instance is understood of being the destination device". However, the Examiner has misunderstood and mischaracterized the APA. The APA illustrates an example where a packet whose destination address is set to another node or another routing device is received (see paragraph 4). The IP layer 2A determines whether to process the packet, and if so sends the packets to the top application module. These portions do not disclose or suggest checking whether the destination address belongs to the routing device, as recited in the claims of the present application. The APA merely discloses that a packet is received and it is determined whether it will be processed and if so it is sent to the top application module. In contrast, as recited in the claims of the

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present application and as illustrated in figure 5 of Applicant's application, the present invention

checks whether the destination address belongs to the routing device, and then if it does,

determines whether it is subject to be routed and if not, sends the packet to a top application

module.

Regarding claims 2-5, 7-13 and 15-21, Applicants submits that these claims are

dependent on one of independent claims 1 and 14 and, therefore, are patentable at least for the

same reasons noted previously regarding these independent claims.

Accordingly, Applicant submit that none of the cited references, taken alone or in any

proper combination, disclose suggest or render obvious the limitations in the combination of

each of claims 1-5 and 7-21 of the present application. Applicant respectfully request that these

rejections be withdrawn and that these claims be allowed.

CONCLUSION

In view of the foregoing Amendment and remarks, applicant submits that claims 1-5 and

7-21 are now in condition for allowance. Accordingly, early allowance of such claims is

respectfully requested. If the Examiner believes that any additional changes would place the

application in better condition for allowance, the Examiner is invited to contact the undersigned

attorney, Frederick D. Bailey, at the telephone number listed below.

Serial No. 10/026,777   Docket No. K-0380
Amdt. dated January 17, 2006
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To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is

hereby made. Please charge any shortage in fees due in connection with the filing of this,

concurrent and future replies, including extension of time fees, to Deposit Account 16-0607 and

please credit any excess fees to such deposit account.

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Respectfully submitted,
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